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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,997	04/15/2004	Herbert Huettlin	03928- P0008A	9221

24126 7590 05/22/2007
ST. ONGE STEWARD JOHNSTON & REENS, LLC
986 BEDFORD STREET
STAMFORD, CT 06905-5619

EXAMINER

LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
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3745

MAIL DATE	DELIVERY MODE
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05/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/825,997

Applicant(s)

HUETT LIN, HERBERT

Examiner

F. Daniel Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/2/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Specification

The disclosure is objected to because of the following:

Paragraph 67 states "Each piston pair has one bearing section 52 for mounting the piston pair on the pivot axis 42...The bearing section 52 and the side wall section 54...are constructed integrally with one another and are arranged on the same side of the respective piston pair". Paragraph 69 states "The bearing section 52 and the bearing section 56 each have a drilled hole 60 or 62 with which the piston pairs 32/36 and 34/38 are pivotally mounted on a fixed journal 64".

Clearly the piston pairs pivot about the fixed journal 64, which is fixed in the holes (60, 62) of the "bearing" section (52, 56). Using bearings for these "bearing" sections is misleading, since these "bearing" sections do not have a bearing. Suggest that the "bearing" sections be renamed --support sections--. Furthermore saying the each piston pair has one "bearing" section is misleading since both "bearing" sections support the fixed journal.

Paragraph 70 states "The bearing sections 52 and 56 extend in the direction of the pivot axis 42 over approximately half the width of the respective piston pair 32/36 and 34/38, respectively...the piston pairs 32/36 and 34/38 are mounted in their entirety over the entire length of the journal 64". If the "bearing" sections are in the side wall sections and the piston pairs are mounted to the fixed journal, as indicated above, it is unclear how the "bearing" sections can extend over half the width of the piston pairs.

Appropriate correction is required.

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication (paragraph 95 and 101) is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

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Claim Rejections - 35 USC § 112

Claims 1-28 and are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 13-14 “each piston pair having a bearing section” and line 18-20 “the bearing section and the side wall sections are constructed integrally with one another and arranged on the same side of the respective piston pair” is wrong, based on the objection the specification above.

In claim 2 line 2-4 “the bearing section extends...approximately half the width of the piston pair in the direction of the pivot axis” is wrong, based on the objection the specification above. In claim 2 the limitation “in the direction of the pivot axis” is repeated (line 2 and 3-4), and so one of them should be deleted.

In claim 9 line 4 “an end element” should be –the side wall section--, to agree with claim 1 line 15. Similar changes should be made to claims depending on claim 9.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim is 1, 2, 5-11, 23, 24 and 28, inasmuch as they are definite, are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Berry (see discussion below).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 12, 13, 16-20, 26 and 27 are rejected under 35 U.S.C. § 103 as being unpatentable over Berry. Berry discloses an oscillating piston machine comprising 4 pistons in a housing (1) having a spherical inner wall (2) and rotating together about a rotational axis, passing through the center of the housing; wherein diametrically opposing pistons of the 4 pistons form 2 rigid pairs (A, A'; B, B'), which pivot about a journal (7) forming a common pivot axis perpendicular to the rotational axis; wherein the piston pairs are arranged in criss-cross fashion such that working chambers (26) are formed between opposing working faces of the piston pairs; the housing having 2 semi-spherical side wall sections (4, 6) integrally formed with a support, which supports the journal; wherein each piston has a conical roller (18) with a roller axis inclined relative to the piston working face between 30-50 degrees (e.g. fig 2); wherein each of two forks (28) have two ends sections between the side wall sections and directly connected to respective ones of the side wall sections; but does not disclose that the forks are releasably connected to the side wall sections.

Official notice is taken that it is well known to releasably connect elements of a machine together, for the purpose of ease of manufacturing. It would have been obvious at the time the invention was made to one having ordinary skill in the art to releasably connect the forks of Berry to the side wall sections, for the purpose of ease of manufacturing.

Claim 22 is rejected under 35 U.S.C. § 103 as being unpatentable over Berry in view of Applicant's admitted prior art. Berry discloses all the elements of claim 22, as discussed in the rejection of claim 12 above, including that there is a variable spaces

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between rear faces of the pistons and the fork; but does not disclose that the variable spaces form admission pressure chambers and/or cooling chambers.

Applicant's admitted prior art teaches, for known oscillating machines, that variable spaces form admission pressure chambers and/or cooling chambers, for the purpose of precompressing combustion air or cooling the piston, respectively (paragraph 42).

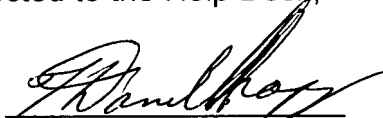
Since Berry and Applicant's admitted prior art are both from the same field of endeavor, the purpose disclosed by Applicant's admitted prior art would have been recognized in the pertinent art of Berry. It would have been obvious at the time the invention was made to one having ordinary skill in the art to form the variable spaces of Berry into admission pressure chambers and/or cooling chambers, as taught by Applicant's admitted prior art, for the purpose of precompressing combustion air or cooling the piston, respectively.

Conclusion

Claims 3, 4, 14, 15 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:00 AM -4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
May 16, 2007